

What is Claimed is:

1. A method for making a data service in a communication system, comprising the steps of:

(1) defining a particular service option on data service between a first mobile station and a second mobile station within the same network;

(2) setting up a data traffic path between a base station controller, the first mobile station and the MSC (Mobile Switching Center) when the first mobile station requests the data service according to the particular service option;

(3) checking the second mobile station making a response through the MSC according to the particular service option;

(4) setting up the data traffic path between the first mobile station and the second mobile station by using the MSC and the base station controller, when the second mobile station makes the response according to the particular service option; and,

(5) carrying out data service between the first mobile station and the second mobile station through the data traffic path.

2. A method as claimed in claim 1, wherein the MSC sets up the data traffic path between the first mobile station and the second mobile station in interlock with a BSP, a CCP, and an SBP in the base station controller.

3. A method for making a data service in a communication system, comprising the steps of:

(1) defining a particular service option on mutual data service between a first mobile station and a second mobile station within the same network;

(2) when the first mobile station requests a call for the data service, the MSC checking the call being requested according to the particular service option;

(3) when the call is requested according to the particular service option, setting up a RLP between the first mobile station, an origination side base station, and the MSC through a VCE in a base station controller;

(4) requesting a paging for the data service from the MSC to the second mobile station that is a destination side;

(5) when the second mobile station makes a response to the paging according to the particular service option, setting up a RLP between the second mobile station, the destination side base station, and the base station controller through the VCE;

(6) setting up a data traffic path between the first mobile station and the second mobile station by means of the MSC; and,

(7) carrying out the data service between the first mobile station and the second mobile station through the data traffic path.

4. A method as claimed in claim 3, wherein the base station controller includes one base station controller for controlling both the origination side base station and the destination side base station, or two base station controllers corresponding to the origination side base controller and the destination side base station controller.

5. A method as claimed in claim 3, wherein a PPP is set up between the origination side first mobile station, and the destination side second mobile station.

6. A communication system for data service, comprising:

an origination mobile station;

a destination mobile station within a network the same with the origination mobile station having a particular service option defined for the data service to the origination mobile station;

5 a base station controller for setting up a RLP between the origination mobile station, an MSC and the destination side base station through a VCE therein, when a call for the data service is requested according to the particular service option; and,

10 the MSC for setting up a data traffic path for data transmission between the destination mobile station and the origination mobile station through the origination base station when the data service is requested according to the particular service option.

15 7. A communication system as claimed in claim 6, wherein a PPP is set up between the origination mobile station and the destination mobile station by means of the MSC.

8. A communication system as claimed in claim 6, wherein the base station controller includes a first base station controller for the origination mobile station and a second base station controller for the destination mobile station.

20 9. A communication system as claimed in claim 6, wherein the base station controller includes one base station controller for controlling both the origination side base station and the destination side base station.

10. A communication system as claimed in claim 6, further comprising personal computers connected to the mobile stations as terminals for the data transmission in the data

service.